

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-7 (canceled)

8. (currently amended) A rotating electric machine according to
~~any one of claims 1 to 7~~ claim 15, wherein said coolers are provided in an
upper or lower portion of said rotating electric machine.

Claim 9 (canceled)

10. (currently amended) A rotating electric machine according to
~~any one of claims 1 to 7 and 9, wherein said stator iron core has a plurality of~~
~~ventilating ducts which continuously extend in the radial direction and which~~
~~are arranged in the axial direction; and wherein~~ claim 15, wherein axial
intervals of ~~these~~ the radially extending ventilating ducts positioned at said
central portion of said stator iron core are smaller than axial intervals of ~~these~~
the radially extending ventilating ducts positioned at the other portion of said
stator iron core.

Claims 11-12 (canceled)

13. (currently amended) A rotating electric machine according to ~~any one of claims 1 and 2~~claim 15, wherein the coolant is air.

14. (currently amended) A rotating electric machine according to claim ~~13~~15, wherein the ventilating circuit includes at least first and second different coolant ventilating circuit portions.

15. (new) A rotating electric machine comprising:

a plurality of annular ventilating passages formed between a stator frame and a stator iron core and arranged in parallel to one another in an axial direction of the stator iron core, each of the plurality of annular ventilating passages being provided for a respective portion of said stator iron core and surrounding and communicating with an outer periphery thereof;

a rotor iron core defining an air gap with an inner periphery of said stator iron core;

a rotating shaft formed integral with said rotor iron core and extending in the axial direction thereof;

a pair of boosters, a respective one of said pair of boosters being disposed on said rotating shaft and proximate to an end thereof, for boosting a coolant and causing the coolant to flow inward of the rotating electric machine;

a plurality of coolers for cooling the boosted coolant, each of said plurality of coolers being provided for a respective one of said plurality of annular ventilating passages;

a plurality of radially extending ventilating ducts formed in said stator iron core and being spaced from one another in the axial direction thereof, each of said plurality of radially extending ventilating ducts permitting the boosted coolant to flow in radial direction through said stator iron core; and

a ventilating circuit which allows the coolant boosted by one of said pair of boosters to flow through the cooler for said annular ventilating passage for a center portion in the axial direction of said stator iron core, the center portion of said stator iron core in a direction from the outer periphery to the inner periphery thereof through the radially extending ventilating ducts therein, a part of the air gap, an adjacent portion of said stator iron core in a direction from the inner periphery to the outer periphery thereof through said radially extending ventilating ducts therein, said annular ventilating passage provided for the adjacent portion of said stator iron core and said cooler associated with said annular ventilating passage for the adjacent portion of said stator iron core to the suction side of the one of said pair of boosters.

16. (new) A rotating electric machine according to claim 15, wherein the coolant is cooled by one of said plurality of coolers prior to being introduced to one of said pair of boosters.

REMARKS

Applicants note that by the present amendment, claims 3-7, 9 and 11 which stand withdrawn from consideration have been cancelled without prejudice to the right to file a divisional direct thereto. It is noted that withdrawn claims 13 and 14 have been amended to depend from claims which should be under consideration, and Applicants submit that upon allowance of such claims, claims 13 and 14 should also be considered and found to be allowable.

By the present amendment, claims 1, 2 and 12, under consideration had been cancelled without prejudice or disclaimer the subject thereof and a new independent claim 15 further defining features of the elected invention of a core ventilating circuit as illustrated in Figs. 4, 9 and 12, as will be discussed below have been presented, claims 8 and 10 have been amended to depend from claim 15 and a new dependent claim 16 has been added. Applicants submit that claims 15, 16, 8, and 10 are directed to the elected invention and should be considered and upon allowance of such claims, dependent claims 13 and 14 should also be considered and found allowable.

As to the objection to claims 8 and 10, Applicants submit that such objections should be overcome by the present amendment of the claims.

As to the rejection of claims 1, 2, 8, 10 and 12 under 35 U.S.C. §102(b) as being anticipated by Willyoung, this rejection is traversed insofar as it is applicable to the present claims and reconsideration and withdrawal of the rejection are respectfully requested.

As to the requirements to support a rejection under 35 U.S.C. §102, references made to the decision of In re Robertson 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

Turning to claim 15, Applicants note that this claim is directed to the arrangement as illustrated in Fig. 4 of the drawings, for example wherein a plurality of coolers 28a-q are provided in a distributed arrangement with respect to individual annular ventilating passages formed around the outer periphery of the stator iron core and provides the advantages as described at pages 12-14 of the specification. As now recited in claim 15, the ventilating circuit allows the coolant boosted by one of the pair of boosters to flow through the cooler represented by the cooler 28d, for example, for the annular ventilating passage for a center portion in the axial direction of the stator iron core, the center portion of the stator iron core in a direction from the outer periphery to the inner periphery thereof through the radially extending

ventilating ducts therein, a part of the air gap, an adjacent portion of the stator iron core in a direction from the inner periphery to the outer periphery thereof through the regularly extending ventilating ducts therein, the annular ventilating passage provided for the adjacent portion of the stator iron core and the cooler associated with the annular ventilating passage for the adjacent portion of the stator iron core, as represented by the cooler 28c, for example, to the suction side of the one of the pair of boosters. Irrespective of the position set forth by the Examiner, Applicants submit that Willyoung shows coolers 9 at either end of the rotating electric machine, and fails to provide coolers arranged in the manner defined in a ventilating circuit providing coolant flow in the manner set forth, in claim 15 and the dependent claims. Applicants note that in Willyoung, the coolant introduced to the outer periphery of the stator iron core central portion is heated by 20°C - 30°C higher prior to reaching such position, because the coolant is heated by the fan 10 and the coil ends of the stator winding 7. Thus, it is readily apparent that Willyoung fails to provide the claimed features in the sense of 35 U.S.C. §102 or 35 U.S.C. §103, as now recited in independent claim 15 and the dependent claims, and Applicants submit that claim 15 and the dependent claims should be considered allowable thereover.

With respect to the dependent claims, Applicants note that the dependent claims, including claims 8, 10, 13, 14 and 16 recite further features which when considered in conjunction with parent claim 15 further patentably distinguish over Willyoung in the sense of 35 U.S.C. §102 and 35 U.S.C. §103 and should be considered allowable thereover.

In view of the above amendments and remarks, Applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courtesy solicited.

Applicants note that a continuation of this application which is application Serial No. 09/912,527 filed July 26, 2001 is pending and has a more advanced prosecution than the present application and is being examined by another Examiner. Accordingly, to comply with the duty of disclosure, submitted herewith is a listing of the documents cited in the co-pending application together with a copy thereof for consideration by the Examiner in this application.

To the extent necessary, Applicants petition for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (Case No. 503.38383X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



Melvin Kraus
Registration No. 22,466
ANTONELLI, TERRY, STOUT & KRAUS, LLP

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Attachments